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ABSTRACT

A survey was conducted to evaluate nationally the retention of undergraduates at institutions of higher education. In particular the survey sought to: determine the rates at which full-time students persisted in and completed higher education; identify factors that institutional representatives felt influence students to leave school; and describe institutional practices and policies to improve retention and their perceived effectiveness. The survey was mailed to 541 institutions; it had an 87 percent response rate. The survey findings showed that of full-time freshmen entering school in fall 1988, 70 percent were still enrolled a year later. The reasons most commonly listed by institutional representatives as important in students choosing to leave without completing a degree or award were financial difficulties, accomplishment of objectives, personal reasons, and poor grades. A majority of institutions collected data on retention within the last year indicating a high level of concern with retention in recent years. Selectivity in admission was the most important predictor of retention at higher education institutions. Programs listed as having a great impact on retention were: help with student finances, help with academic problems, and testing and performance assessment. In the past 5 years, 81 percent of institutions had developed programs aimed at increasing retention. Included are nine figures, and appendixes containing detailed tables, technical notes, and the survey questionnaire. (JB)

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# SURVEY ON RETENTION AT HIGHER EDUCATION INSTITUTIONS

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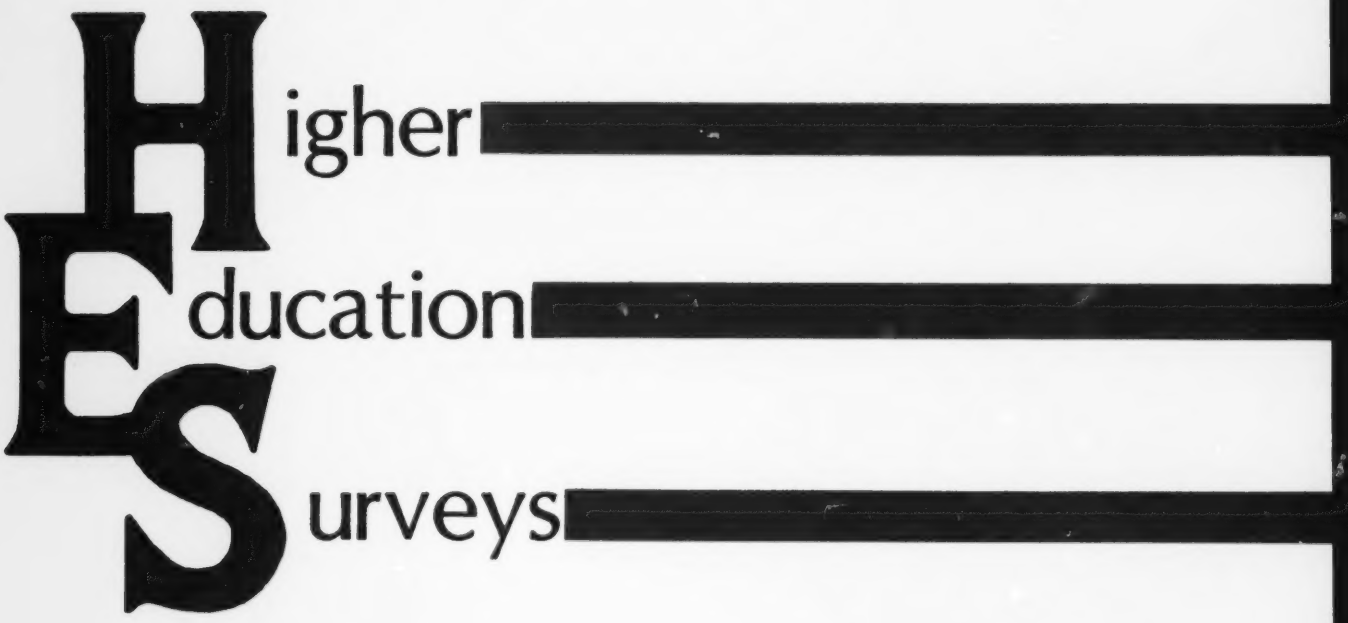


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HE 025 308

Higher Education Surveys Report
Survey Number 14
November 1991

A Survey System Sponsored by the National Science Foundation, the National Endowment for the Humanities, and the U.S. Department of Education



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## Highlights

A HES survey of officials at higher education institutions gathered the following information about the retention of undergraduates at their institutions.

- Of students entering as full-time freshmen in fall 1988, 70 percent were still enrolled at the same institution in fall 1989. Of those entering institutions offering bachelor's degrees in fall 1984, 49 percent had completed a bachelor's degree within 6 years. An estimated 53 percent of students entering as full-time freshmen at those institutions ultimately graduated from the same institution. At 2-year institutions, 33 percent ultimately graduated from the same institution. The 6-year baccalaureate completion rate varied from 57 percent at doctorate-granting institutions to 42 percent at comprehensive institutions.

- Attempts to obtain data on retention rates separately by racial/ethnic categories were unsuccessful. Less than 70 percent of institutions could provide the requested data, and those institutions that could provide data were different from those that could not.

- The reasons most commonly listed by institutional representatives as very important in students choosing to leave without completing a degree or award were student financial difficulties (38 percent of institutions), student objectives were accomplished (30 percent), other personal reasons of the students (29 percent), and poor academic progress (25 percent).

- A majority of institutions collected data on retention within the last year, with the most common method being the examination or compilation of institutional records (68 percent). The data were used to determine overall retention patterns (80 percent), predict which students needed attention (72 percent), and examine the effect on retention of particular programs (62 percent).

- Selectivity in admissions was perhaps the most important predictor of retention at higher education institutions, explaining 17 to 29 percent of the variation in retention rates. However, most institutions were not selective, with 20 percent of all institutions offering open admissions for at least some students, and another 39 percent offering open admissions for all students.

- The institutional programs that were most often listed as having a great impact on retention were help with student finances (64 percent), help with academic difficulties (54 percent), and testing/performance assessment (41 percent).

- Over the last 5 years, 81 percent of institutions established new programs or modified existing programs in order to increase retention.

- More than half of the institutional representatives (58 percent) predicted that attrition at their institution would not change substantially over the next 5 years, while 39 percent said attrition would decrease by at least 10 percent.

# SURVEY ON RETENTION AT HIGHER EDUCATION INSTITUTIONS

Sponsored by and written for:

Planning and Evaluation Service
Office of the Under Secretary
The U.S. Department of Education

Bradford Chaney, Westat, Inc.
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Higher Education Surveys Report
Survey Number 14
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- Daniel Goldenberg, Maureen McLaughlin, Robert Berls, James Maxwell, and David Goodwin, Planning and Evaluation Service, Office of the Under Secretary, U.S. Department of Education

- Patricia White, HES Program Officer, Science and Engineering Education and Human Resources Program, Science and Engineering Education Sector Studies Group, National Science Foundation

From Westat, Debbie Alexander was the data preparation supervisor for the survey and supervised the telephone followup.

We also acknowledge the indispensable contribution of the many officials, faculty, and staff members at the sampled institutions who completed the survey questionnaires.

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# Introduction

Attrition of college students has always been high, with as many as half of the entering students leaving without a degree. The problem seems to have worsened in recent years.

Most studies of retention have dealt with individual campuses or state systems. With the exception of work done on the major longitudinal databases (National Longitudinal Study of 1972 and the High School and Beyond Sophomore and Senior Cohorts), there are little or no national data on retention.

The purpose of this study was to provide up-to-date national data on retention from a representative sample of higher education institutions. The specific objectives of the study were as follows:

- To determine the rates at which full-time students persisted in and completed higher education and how these rates differ for different types of institutions and different racial/ethnic groups;
- To identify those factors institutional representatives felt were most important in determining why full-time students leave school; and
- To describe institutional practices and policies to improve retention and their perceived effectiveness.

The report presents our findings in these three areas, preceded by a discussion of methodological issues.

Despite its importance, retention at higher education institutions is an elusive concept. There is no single definition common to all institutions or researchers. Indeed, collecting data on retention is difficult because some institutions only started collecting such data relatively recently, and because different institutions define retention in different ways. Data on retention are also considered highly sensitive, so that institutions are often unwilling to provide retention data without promises of confidentiality. (In this survey, institutions were promised that all data would be kept in strict confidence, contributing to the relatively high response rates received.)

One important methodological issue for this study was selecting the group of students for which retention statistics would be calculated. For the purpose of this report, retention was defined in terms of full-time students only. A difficulty with this definition is that a large and increasing proportion of students enroll as part-time students, and many schools (especially 2-year schools) primarily serve part-time students.[1] Although the choice to focus on full-time students results in ignoring a large segment of the students enrolled in higher education institutions, retention for part-time students is more difficult both to conceptualize and to measure than for full-time students. Students who are enrolled part time are probably less likely than those who are full time to be seeking degrees, making a definition of program completion more difficult.

[1]Many respondents at 2-year institutions indicated that, because of the great importance of part-time students, they had difficulty in providing data on full-time students only, and that the questionnaire was more relevant to other institutions than to their own.

They require additional time to complete all program requirements, so it is difficult to set a standard time period for evaluating program completion. Also, databases are less likely to be able to track students backwards over the additional years required for part-time students to complete their programs. Finally, very likely part-time students also face different issues in terms of their ability to maintain their enrollment in higher education, and require different programs to reduce student attrition. Thus, a study of retention for part-time students was judged an analysis that would be better conducted separately.

A second methodological issue was that data on retention were collected from institutions, not from students. Institutions vary in their ability to provide precise information on retention. When providing information on why students leave their institutions, some respondents gave their general impressions while others used student surveys to provide their answers. Depending on the method used, the answers provided by the institutional representatives were not necessarily the same as those that might be provided by a survey of students. Also, it was not possible to determine if information on retention rates was based on actual data or "best guesses." Responses on the nature and effectiveness of retention programs in place at each school were, by their nature, subjective and depended somewhat on who at the institution completed the survey.

Third, though this study was intended to provide national data on retention, the focus was primarily on whether students graduated from the same institutions that they first entered, rather than on whether students continued to pursue higher education in general. Retention rates are therefore understated by the extent to which students transferred and continued their education elsewhere. Complete statistics on transfers as they relate to retention were difficult to collect, but data presented later in this report indicate that one-sixth of all students first entered their current institution through a transfer.

Finally, it is difficult to calculate the effects of institutional programs on retention when the existence and nature of those programs are themselves affected by retention. A school with low retention may establish a retention program that is highly effective in increasing the retention rate, yet the retention rate still may be lower than at another school that had no problems with retention and never felt the need to establish a program. A straight comparison of retention rates between the two institutions might misleadingly imply that the retention program was harmful to retention, when the program actually lessened the gap in retention rates. For this reason, this report does not use retention rates to evaluate specific programs. Instead, officials at the responding institutions were asked to provide their own evaluations of the effectiveness of their programs.

## Retention Rates

Data were collected so that retention rates could be measured in three ways: over 1 year, over 6 years, and over an indefinite time period. The 1-year retention rate was based on the number of full-time, first-time freshmen in fall 1988 who were still enrolled after 1 year. Because a large percentage of those students who ultimately leave do so in the first year, this was a useful measure of retention. This measure also has the advantage of being meaningful for all types of institutions (although 2-year institutions typically have a high percentage of part-time students). Second, a 6-year retention rate was based on the percentage of full-time, first-time freshmen in fall 1984 who completed bachelor's degrees within 6 years. However, this measure did not apply to all institutions since some did not offer baccalaureate degrees. (A period of 4 years has traditionally been considered the normal time for completion of a bachelor's degree, but completion time appears to be increasing nationwide. For this survey, the 6-year time frame was adopted in order to allow more leeway for those students requiring extended periods to graduate.) Third, respondents were asked to state the average percentage of *all* full-time, first-time freshmen who ultimately graduate, ignoring the length of time required to complete the degree.[2] This measure is different from the previous measures both in the absence of a time period restriction, and in its inclusion of all degrees (e.g., associate degrees) and not just baccalaureate degrees. It is also the least reliable of the three retention measures, due to institutions' difficulty in determining ultimate graduation rates for their students. Typically, this measure reflected institutional officials' estimates, rather than precise statistics.[3] However, the measure was retained because it received the highest response rate, and because, unlike the 6-year baccalaureate completion rate, it was meaningful for 2-year colleges and was thus a more comprehensive measure.

For the first two measures, institutions were asked to provide both overall statistics, and statistics for six racial/ethnic categories (white, non-Hispanic; black, non-Hispanic; Hispanic; Asian or Pacific Islander; American Indian or Alaskan Native; and non-resident alien), while for the third measure, only overall statistics were collected. However, institutions often had difficulty in providing data on retention using racial/ethnic categories, and the item response rate was too low (i.e., below 70 percent) to consider the estimates to be reliable (Appendix Table A-1). For example, while 83 percent of institutions could provide information on the total number of freshmen who enrolled in fall 1988 and were still enrolled in fall 1989, only 69 percent could provide comparable information for blacks, and 67 percent for Hispanics. Similarly, 87 percent of institutions granting baccalaureate degrees could provide overall 6-year baccalaureate completion rates, but only 68 percent for blacks and 67 percent for Hispanics. In addition, supplementary analyses (not included in this report) indicated that the characteristics of institutions that

[2]Another retention measure was attempted, but it was not considered reliable because of problems with missing data. This measure was the number of full-time, first-time freshmen who completed associate degrees within 3 years.

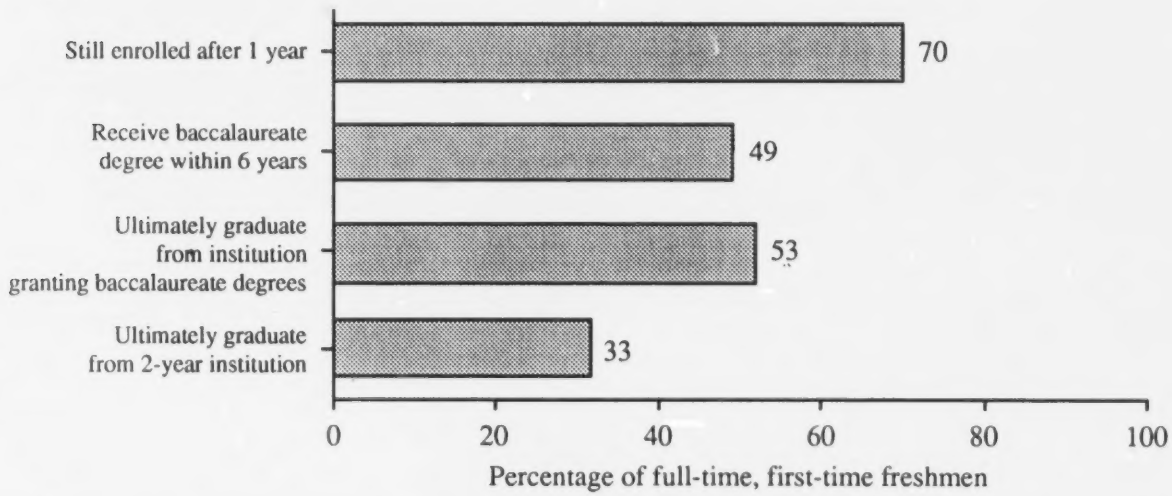
[3]Examination of the data revealed frequent inconsistencies between the reported ultimate graduation rate and the 6-year baccalaureate completion rate. Many institutions reported lower ultimate graduation rates than 6-year rates, though the differences were typically small. The inconsistencies are another indication that the data on ultimate graduation rates were not as reliable as those on 6-year rates.

could provide data by racial/ethnic category differed from those that could not. For this reason, the report presents data only on overall retention rates, and not by racial/ethnic category.

Among all schools, 70 percent of full-time, first-time freshmen who entered in fall 1988 were still enrolled at the same institutions in fall 1989 (Figure 1; Appendix Table A-2). Retention was lowest at 2-year institutions, where 58 percent of freshman were still enrolled after 1 year. In comparison, 75 percent of those at baccalaureate institutions and 81 percent of those at doctorate-granting institutions were still enrolled after 1 year. Retention was also lower at public institutions (68 percent) than at private institutions (76 percent), at small institutions (those with full-time enrollments less than 1,000; 63 percent) than at large institutions (those with full-time enrollments of 5,000 or more; 74 percent), and in the West (66 percent) than in the Northeast (76 percent).[4]

Among those schools offering baccalaureate degrees, 49 percent of full-time, first-time students entering in fall 1984 had completed a bachelor's degree at the same institution by 1989-90. Thus, substantial attrition did continue after students' first year, though at a slower rate.[5] Completion of degrees was greater at doctorate-granting institutions (57 percent) than at comprehensive institutions (42 percent), at private institutions (56 percent) than at public

**Figure 1. Retention rates at higher education institutions: United States**




Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

[4]Systematic differences between schools in the Northeast and those in the West may be due to regional differences in institutional characteristics. In the Northeast, 61 percent of institutions were private, compared with 35 percent in the West.

[5]Technically, not all cases of students who fail to complete degrees after 6 years are cases of attrition. Also included are students who were still enrolled after 6 years, rather than having completed their degrees in that time. However, a statistic to be presented in the next paragraph suggests that relatively few additional students graduate beyond those who graduate in 6 years.

institutions (45 percent), and at large institutions (50 percent) than at small institutions (35 percent).

Another measure of retention is the percentage of full-time, first-time freshmen who ultimately graduate from the same institutions (regardless of the time period required). At those schools providing a 6-year baccalaureate completion rate, 53 percent of their full-time, first-time freshmen ultimately graduate. This calculation reveals that essentially all students who graduate from the institution they first enter do so within 6 years. Among full-time, first-time freshmen at 2-year schools, the ultimate graduation rate was much lower (33 percent).

These retention rates all concern retention within a single educational institution. However, one cause of attrition--transferring from one institution to another--does not reflect attrition from higher education itself. Instead, transfers reflect factors such as a student's move to a new location, a choice of a different academic program, a change in the student's financial position, or a student's personal dissatisfaction with (or attraction to) a particular institution. These reasons do not reflect a problem with the educational system in general, but rather reflect individual characteristics of particular students and institutions.

Estimating the effect of transfers on degree completion rates is difficult when using institutional data, because an institution is generally not informed about a student's academic progress once he/she leaves. Instead, institutional representatives were asked to provide the number of students who first entered as transfer students. The resulting number--16 percent--indicates that institution-specific retention rates may significantly understate retention within higher education as a whole. Many students did stay within higher education, though they did not graduate from the institution they first entered. Differences between institutions in their transfer rates were generally small. However, a greater percentage of students at institutions in the West first entered through transfers (21 percent) than those in the Northeast (11 percent), and a greater percentage in public institutions (18 percent) than in private institutions (12 percent).

## Why Students Leave Higher Education

Officials at each surveyed institution were asked to provide their opinions on the importance of each of eight reasons for students leaving school, using the following categories: *very important*, *moderate importance*, *little importance*, and *no importance at all*. The eight reasons listed were:

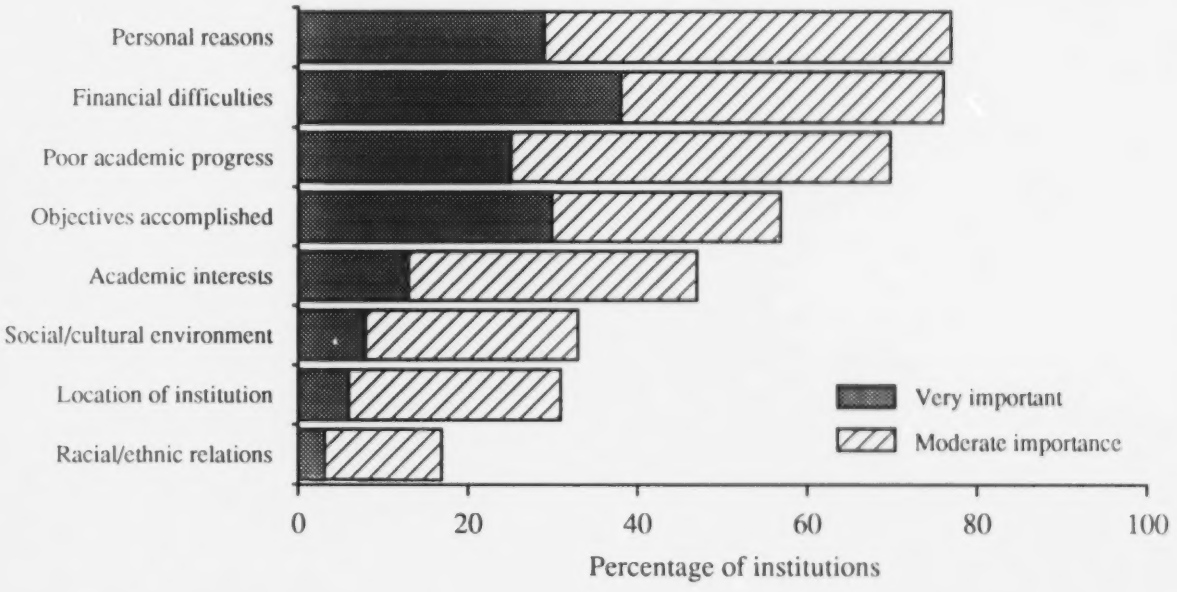
- Academic interests of student better met elsewhere,
- Institutional social/cultural environment,
- Racial/ethnic group relations (for minority students),
- Location of institution,
- Financial difficulties of student,
- Poor academic progress of student,

- Objectives of student have been accomplished, and
- Other personal reasons of student.

Of these, four factors were listed by at least one-fourth of the respondents as very important in students' decisions to leave (Figure 2). These factors were financial difficulties (38 percent), the objectives of the student had been accomplished (30 percent), other personal reasons of the student (29 percent), and poor academic progress of the student (25 percent). However, these were not the only important factors. Three other factors (students' academic interests, the social/cultural environment, and the location of the institution) were listed as having at least moderate importance in why students leave school by roughly one third or more of the respondents. Even the item least frequently marked as important, racial/ethnic relations, was given at least moderate importance by 17 percent of respondents.

As noted earlier, 2-year institutions are likely to face different issues in retention than other institutions. This was confirmed in the different responses that were received from officials at 2-year institutions. The most dramatic difference was that they were much more likely to say students left because they accomplished their objectives (54 percent) than those at any other type of institution (ranging from 2 percent at doctorate-granting institutions to 6 percent at baccalaureate institutions; Appendix Table A-3). Another difference was that they were more likely to say students left for other personal reasons (37 percent) than those at baccalaureate institutions (20 percent).

**Figure 2. Perceptions of officials at higher education institutions on the importance of various factors in students' leaving without completing a degree or award: United States**




Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Differences also appeared between public and private institutions. Representatives of public institutions were less likely to see student financial difficulties as a very important factor in why students leave their institution (29 percent vs. 46 percent at private institutions), but were more likely to say students leave because their objectives had been accomplished (46 percent vs. 15 percent).

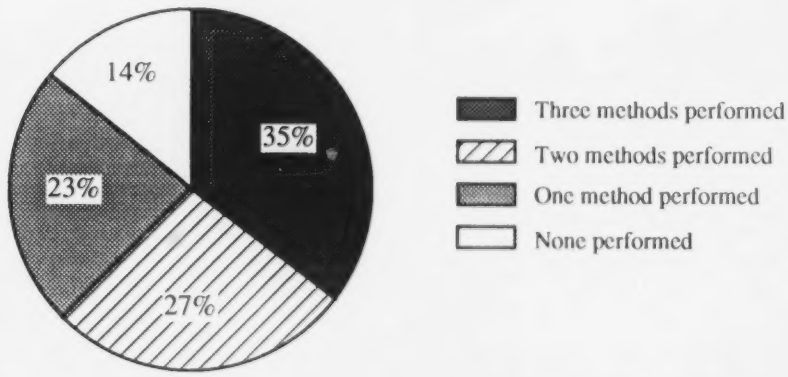
## Institutional Attention to Retention

Part of the purpose of this study was to examine how institutional actions affect retention. This section will look at several institutional activities related to retention, including performing studies on retention, using admissions policies in ways that might affect retention, and providing programs that might affect retention.

### Studies of Retention

Officials were asked how recently they had conducted each of three types of studies to examine retention: compiling/examining institutional records, conducting a survey of students, and interviewing selected students (e.g., exit interviews). At the time of the survey (July 1990), not only had most institutions performed at least one of these types of studies in the last year, but most had performed more than one (Figure 3; Appendix Table A-4). The method most frequently used was compiling and examining institutional records (68 percent), while 62 percent of institutions interviewed selected students, and 54 percent conducted a survey of students.

**Figure 3. Number of different methods used by higher education institutions to study retention in the last year: United States**




NOTE: The three methods listed in the questionnaire were: compiled/examined institutional records, conducted survey of students, and interviewed selected students (e.g., exit interviews). Percentages do not add to 100 because of rounding.

Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Most of the differences among institutional categories were not statistically significant. However, interviewing selected students was more common among private institutions (74 percent) than public institutions (50 percent).

Respondents were asked if three types of analyses were performed with the data collected. Most commonly, the data collected were used to determine overall retention patterns (80 percent), although majorities of institutions also used the data to attempt to predict students needing attention (72 percent), and to examine the effect on retention of particular programs (62 percent).

Two-year institutions were more likely than baccalaureate institutions to have examined the effect on retention of particular programs (72 percent vs. 45 percent). Another difference among institutions was that large institutions more often used the data to determine overall retention patterns (93 percent) than small institutions (73 percent).

## Admissions Policies

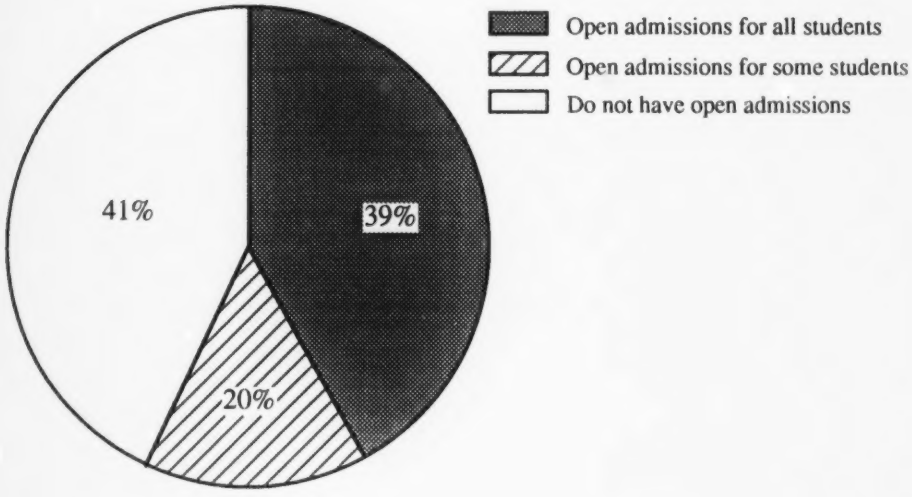
Admissions policies can be logically related to retention. As noted earlier, 25 percent of respondents said that poor academic progress was a very important factor in students' decisions to leave; thus, institutions that use their admissions standards to help assure academic success might be expected to have higher retention rates than those that have open admissions or are otherwise less discriminating in their admissions. Further, several other reasons for leaving are potentially affected by admissions, such as the degree to which students are admitted whose academic interests are met by the institution or who will be satisfied with the social and cultural environment. Though these reasons were not the most highly ranked in terms of importance, still substantial numbers of respondents indicated that these reasons had at least moderate importance.

For this reason, several questions were asked concerning admissions policies. One question asked whether institutions had open admissions, other items asked the standards that were used in admissions decisions for those institutions that did not have open admissions, and several items were directed at determining the selectivity of the institution in admissions.

### Characteristics of Admissions Programs

A majority of institutions had open admissions for at least some classes of students, and thus would have limited ability to use admissions as a method of influencing retention (Figure 4; Appendix Table A-5). An estimated 39 percent had open admissions for all students, and another 20 percent for some students (e.g., in-state students). Essentially similar percentages occurred when computed in terms of the number of students, rather than the number of institutions. The institutions most likely to have had open admissions for all students were 2-year institutions (76 percent, compared with a range of 1 percent at doctorate-granting institutions to 12 percent at comprehensive institutions), public institutions (63 percent vs. 16 percent at private institutions), and institutions in the West (55 percent vs. 25 percent in the Northeast).

**Figure 4. Percentage of schools with open admissions: United States**




Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Several factors were part of the admissions policies of those institutions that did not have open admissions. Almost all of these institutions set their standards so students meeting them could succeed academically (90 percent), with very little variation among institutions. A large percentage of institutional representatives also said that admissions decisions were intended to increase retention (82 percent), again with few differences among institutions.

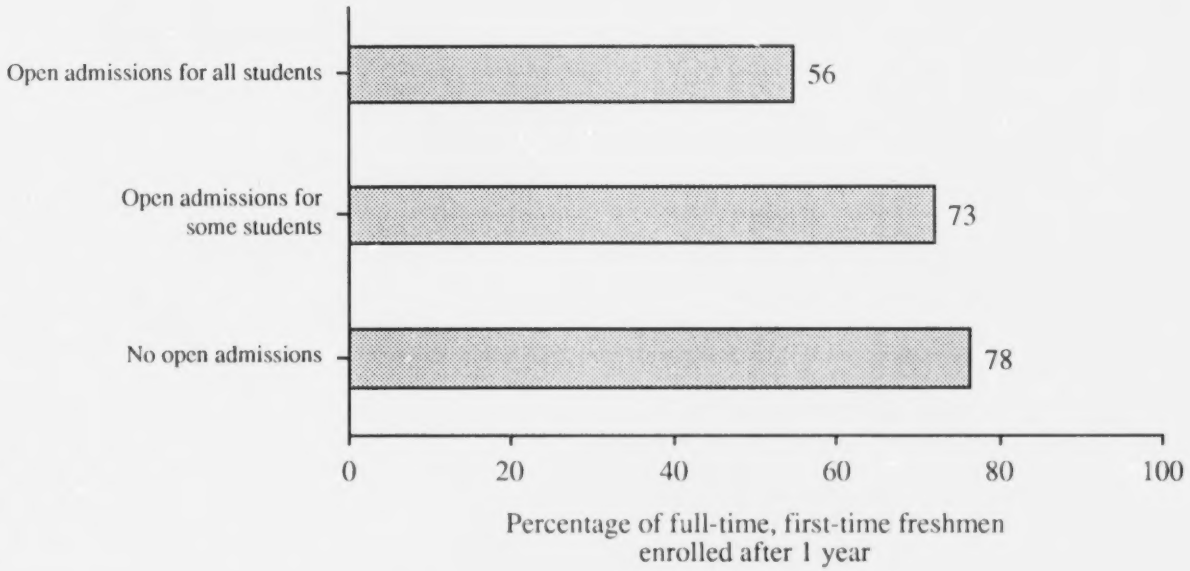
Institutions typically set standards that allowed for exceptions and other factors to be considered in admissions. Three-fourths of institutions accepted marginal students with the intention of providing the support needed for the students to continue; the policy was more common among public institutions (85 percent) than among private institutions (73 percent). A majority (57 percent) considered nonacademic factors (such as a student's "fit" with the institution).[6] Nonacademic factors were especially considered at private institutions (68 percent, vs. 32 percent at public institutions), small and medium sized institutions (60 and 63 percent, respectively) rather than large institutions (37 percent), and in the Northeast (71 percent) as compared with the Southeast (38 percent). Finally, almost half (48 percent) of the institutions with

[6]The exact nature of the nonacademic factors was not determined. Overall, respondents were encouraged to say nonacademic factors were considered only if they had a general policy of using those factors, rather than if special standards were used for certain categories of students (e.g., for student athletes). However, respondents may have varied in the criteria they used to answer that question.

admissions standards sometimes waived those standards for certain students. This was more common among public institutions (59 percent) than private institutions (43 percent), and among large institutions (70 percent) than among small institutions (38 percent).

Admissions policies were often related to differences in retention rates among institutions. The greatest differences in retention rates were based on the presence of an open admissions policy. At those schools with open admissions for all students, the 1-year retention rate was 56 percent, while the comparable rates were 73 percent at institutions with open admissions for some students and 78 percent at institutions with no open admissions policy (Figure 5; Appendix Table A-6). Similar relationships occurred with both other measures of retention rates (i.e., 6-year baccalaureate completion rates and ultimate graduation rates). There also were differences in retention rates among schools without open admissions for all students, depending on the admissions policies used. Six-year baccalaureate completion rates were higher for institutions that considered nonacademic standards in their admissions (56 percent vs. 45 percent), refused to admit marginal students (57 percent vs. 48 percent), and tried to increase retention through admissions (52 percent vs. 44 percent).

**Figure 5. Admissions policies and retention rates after 1 year: United States**



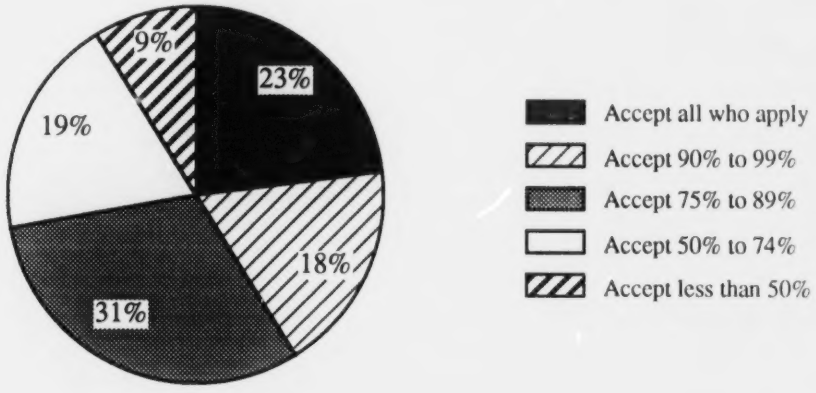

Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

## Measures of Selectivity

A wide variety of schools fall in the category of not offering open admissions. Some institutions are highly selective, while others essentially accept all students who apply who meet certain minimum criteria. Also, institutions differ in the type of students who apply; depending on the programs offered at the institution and on the institution's reputation, some institutions have applicants with substantially different academic qualifications than those at other schools. To better evaluate these variations among institutions, several questions were asked about the selectivity of institutions. These included direct questions about selectivity (the number of students who applied, the number accepted for admission, and the number who enrolled), as well as questions about the students' academic qualifications (i.e., mean SAT and ACT scores, mean high school grade point average, and the percentage in the top 25 percent of the high school class).

One measure used was the ratio of the number of people accepted for admission to the number who had applied. By this measure, most higher education institutions accepted a large proportion of the students who applied, and thus were relatively limited in their ability to use admissions decisions as a means of improving retention (Figure 6). Among all institutions, 23 percent accepted all students who applied, and almost three-fourths of institutions accepted 75 percent or more of all students who applied. Only 9 percent of institutions accepted less than half of the students applying.[7]

**Figure 6. Percentage of applications accepted for admission at higher education institutions: United States**



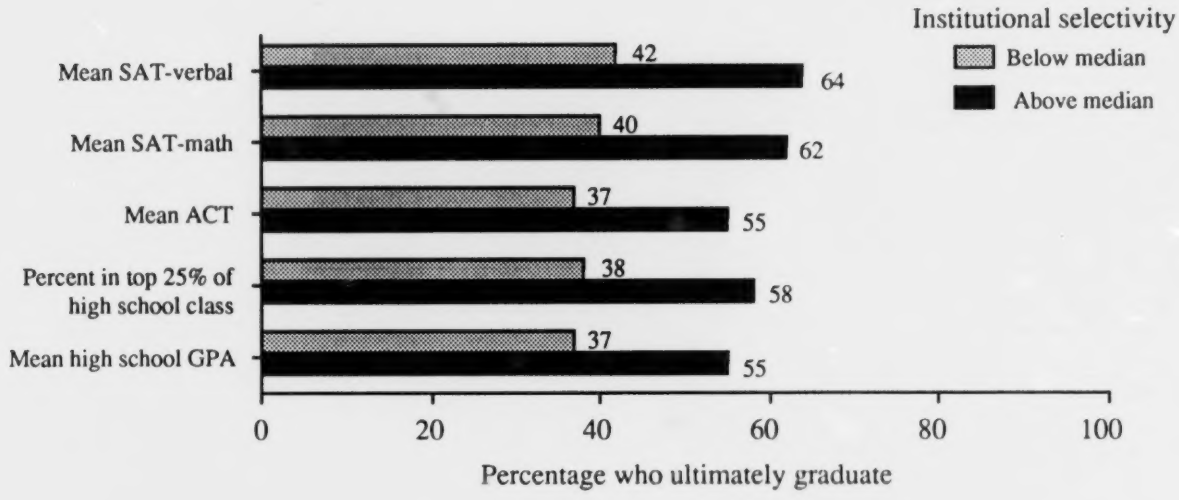

Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

[7]This measure does not correspond exactly with the presence of open admissions. Some schools with open admissions did not accept all students applying, while some schools without open admissions did accept all students applying.

Figure 7 and Appendix Table A-7 provide comparative retention rates for a variety of measures of selectivity. Substantial differences in retention rates occurred depending on whether the institutions were above or below the median in selectivity. For example, those institutions that were above the median in the percentage of entering freshmen in the top 25 percent of their high school classes had higher retention rates than those below the median. This was true for every retention measure: the 1-year retention rates were 79 percent and 65 percent, the 6-year baccalaureate completion rates were 55 percent and 32 percent, and the ultimate graduation rates were 58 percent and 38 percent.

These measures of selectivity are highly interrelated, and also subject to substantial missing data. As an additional test of the importance of selectivity, a regression equation was estimated using two independent variables to predict retention and completion rates: the use of an open admissions policy for all students, and the percentage of applicants rejected for admission at those schools not having an open admissions policy for all students. These two variables alone were sufficient to explain 17 to 29 percent of the variance, which further indicates the importance of selectivity in determining retention rates.

**Figure 7. Ultimate graduation rate of full-time, first-time freshmen, by selectivity of institution: United States**




Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

## Institutional Programs to Affect Retention

The analysis of institutional programs to affect retention is complicated by the great diversity of programs among institutions. One problem is that, in concept, almost any program may be considered a retention program, to the extent that anything improving the physical, academic, or social environment for students may have an effect on retention. For example, the building of a new gymnasium may not be specifically labelled as a retention program, but may improve student satisfaction and pride in the institution, with improved retention as a result. For this reason, the focus of the questionnaire was on the existence and nature of programs, rather than on whether the programs were directed at retention. A second and related problem is that the number and diverse characteristics of all "retention-related" programs is too great to allow detailed analysis of specific features of the programs, even though the effectiveness of the programs may well depend on such specific features. To simplify the analysis, potential retention-related programs were grouped into eight larger categories:

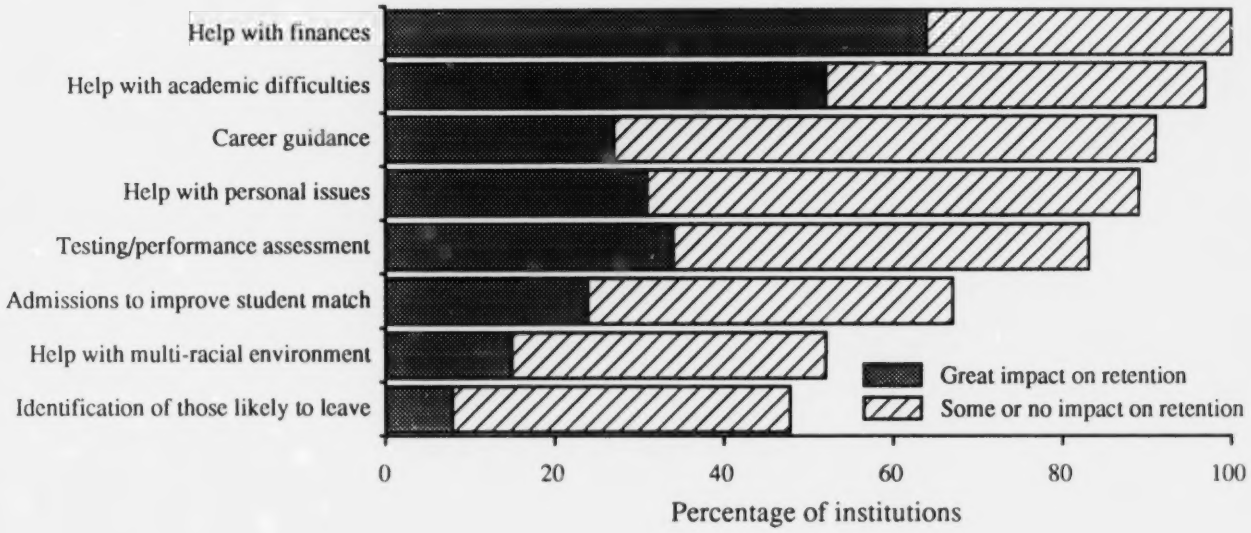
- Admissions programs to improve student match with college (e.g., on-campus interviews, alumni recruiting);
- Testing/performance assessment to monitor students' progress or place them in courses (e.g., aptitude testing);
- Help for students with academic difficulties (e.g., remedial courses, academic advising, mentoring, identifying at-risk students, introductory summer program);
- Help for students with personal issues (e.g., personal counseling, child care);
- Help with student finances (e.g., on-campus employment, financial aid);
- Help with problems arising from a multi-racial and -ethnic environment;
- Identification of students likely to leave; and
- Career guidance.

For each category, respondents were asked to indicate whether their institution had a program, the total number of staff (both full time and part time) assigned to the programs, the percentage of all full-time students involved in the program at some point in their academic careers, and the program's impact on retention for participating students.[8]

To a large degree, the programs that were most common were also the programs that institutional representatives felt had the greatest impact on retention (Figure 8; Appendix Table A-8). Thus, the two programs that were the most common were also the two programs that had a majority saying the programs had a great impact on retention. Help with student finances was provided by all of the institutions, and close to two-thirds (64 percent) said it had a great impact on retention. Help with academic difficulties was provided by 97 percent of the institutions, and 54 percent said it had a great impact on

[8]Based on a response to another item in the questionnaire, there were probably some institutions that conducted activities in an area but did not specify that they had a program. One reason is that a program may have been so new that it seemed inappropriate to list it in a question asking for the number of staff and number of students involved. Another reason is that the term "program" may have seemed too formal to describe a component of some other activity (e.g., there may have been a retention "program" that included a component relating to admissions). The areas where this distinction may be significant are in *admissions programs* and *identification of students likely to leave*; in both areas, 13 percent of respondents said their institutions had made changes over the last 5 years, but did not indicate having a program.

**Figure 8. Percentage of institutions with various programs, and officials' ratings of the impact of those programs on retention: United States**




Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

retention. These were not the programs with the largest percentage of students involved (the highest was testing/performance assessment, involving a mean of 78 percent of the students), but did involve substantial numbers of students. A mean of 60 percent of students received help with finances, and 42 percent with academic difficulties.

Though not all programs were as widespread as help with finances and academic difficulties, even the two least common were available at half the institutions. All other programs were found at two-thirds or more of the institutions. Almost every category of program also had fairly extensive student involvement. Except for providing help with problems from being in a multi-racial and -ethnic environment (with a mean of 19 percent of students involved), every program category had involvement of roughly one-third or more of students.[9]

Certain programs were more common at some categories of institutions than at others (Appendix Table A-9). Doctorate-granting institutions were more likely to have admissions programs to improve the student match (84 percent) and help with a multi-racial and -ethnic environment (89 percent) than 2-year institutions (52 percent and 45 percent, respectively). Public institutions more often had testing/performance assessment (96 percent) and help with a multi-racial and -ethnic environment (59 percent) than private institutions (71 percent and 45 percent), but less often had admissions programs to improve the student

[9]No measure was made of the number of students *needing* attention in each area. Some programs may have served all appropriate students, yet still have had lower student involvement because fewer students needed help. This may explain the relatively smaller number of students helped with problems in a multi-racial environment.

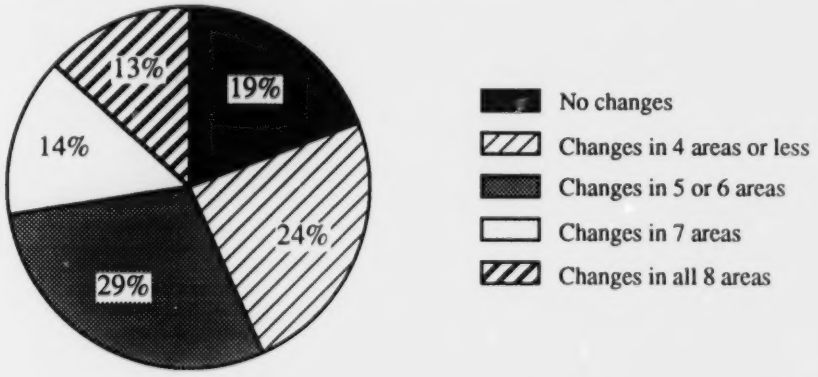
match (54 percent vs. 79 percent). Large institutions more frequently than small institutions offered help with a multi-racial environment (89 percent vs. 34 percent), testing/performance assessment (93 percent vs. 75 percent), and career guidance (98 percent vs. 85 percent).

Respondent's estimates of the impact on retention often showed statistically significant differences among programs (Appendix Table A-10). For example, both providing help with finances and providing help with academic difficulties were estimated as having a great impact more often than any other listed item. In contrast with differences *among* programs, however, differences *within* programs based on institutional characteristics often appeared substantial but were not statistically significant. One reason was that only institutions with programs could estimate the impact on retention, so that the estimates were often based on small numbers of respondents.

A questionnaire item also asked whether institutions had adopted new programs or substantially modified existing programs over the last 5 years. The same eight categories were offered as possible responses, but unlike the previous items using these categories, respondents were asked specifically about changes intended to increase retention. Four-fifths of the institutions had made changes (Figure 9; Appendix Table A-11).

Change was common over all of these areas, with even the least common changes occurring in roughly half the institutions (help with a multi-racial and -ethnic environment, at 46 percent). The area in which almost all institutions made changes aimed at retention was in helping students with academic difficulties (91 percent), while the next most common areas for change were testing/performance assessment (77 percent), help with student finances (74 percent), help with personal issues (70 percent), and admissions programs to improve the student match (68 percent).

**Figure 9. Number of areas in which higher education officials reported changes over last 5 years in programs to affect retention: United States**




NOTE: Changes were indicated for eight areas: admissions programs, testing/performance assessment, help with academic difficulties, help with personal issues, help with finances, help with racial and ethnic problems, identification of students likely to leave, and career guidance. Percentages do not add to 100 because of rounding.

Source: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Changes were not equal across all institutions. Doctorate-granting institutions more often changed help with a multi-racial and -ethnic environment than 2-year institutions (85 percent vs. 35 percent). Differences between large and small institutions were generally small, but large institutions were more likely to institute change concerning help with a multi-racial environment (87 percent vs. 29 percent). Public institutions more often than private institutions made changes in testing (91 percent vs. 62 percent) and help with a multi-racial environment (54 percent vs. 36 percent), while private institutions made changes more often in admissions programs (76 percent vs. 62 percent), help with personal issues (79 percent vs. 62 percent), and help with finances (80 percent vs. 69 percent).

The majority of respondents (58 percent) predicted that their institution's retention rate would change by less than 10 percent over the next 5 years. Of the remainder, the vast majority expected improvement. An estimated 39 percent predicted a decrease in attrition of at least 10 percent, and 3 percent predicted an increase. Decreases were predicted most in 2-year and baccalaureate institutions (42 percent and 47 percent, respectively), and least in doctorate-granting institutions (18 percent).

## Summary

After enrolling as full-time freshmen in fall 1988, 70 percent of students continued to be enrolled at the same institution in fall 1989. By 6 years after enrollment (in fall 1994), 49 percent of those at schools offering bachelor's degrees had completed a bachelor's degree at the same institution. Thus, attrition was heaviest in the first year of attendance at an institution, but continued at significant levels beyond that time. Relatively few additional students completed their degrees at the same institution after 6 years.

However, not all students who left an institution without completing a degree or award also left higher education. An estimated 16 percent of all full-time undergraduates enrolled in fall 1989 had first entered the institution in which they were currently enrolled as transfer students. This suggests that institution-specific retention rates may significantly overstate the extent to which students were leaving higher education as opposed to just switching schools.

The major reasons why students left without completing a degree or award, according to the perceptions of officials at higher education institutions, were financial difficulties of the students, students' accomplishing their objectives in education, other personal reasons, and poor academic progress. These reasons are subject to varying degrees of influence by actions of higher education institutions. Some reasons, such as the educational objectives of students and other personal reasons of students, are largely characteristics of students, though institutions may sometimes have influence. The other two reasons--financial difficulties and poor academic progress--also involve characteristics of the students, though they may be subject to institutional programs such as financial aid and academic help for students with academic difficulties. Characteristics of the institution, such as academic offerings, the social/cultural environment, racial/ethnic group relations, and the location of the institution,

were generally not considered as important by institutional representatives in students' choices to leave.

The best single predictor of retention and completion rates was the selectivity of the institutions. Institutions whose students showed above average academic qualifications on entrance, or institutions that were selective in their admissions processes, had the highest retention rates. However, open access to higher education has long been a goal of the educational system, and most institutions were not highly selective. Thirty-nine percent of institutions had open admissions, while the vast majority of the remaining institutions either had open admissions for some students, sometimes waived admissions standards, sometimes accepted marginal students, or considered nonacademic factors in admissions.

Officials at higher education institutions indicated that some institutional programs often did have a great impact on retention. The programs mentioned most frequently were help with finances (64 percent) and help with academic difficulties (54 percent). These programs involved, on average, 60 percent and 42 percent of students, respectively. Testing and performance assessment involved the greatest percentage of students (78 percent), and was thought to have a great impact on retention by 41 percent of institutional representatives. Of eight different types of institutional programs, even the least common was found at one-half the schools, and almost every institution indicated that the programs had at least some impact.

The findings also indicated a high level of institutional concern with retention in recent years. The vast majority of institutions had performed one or more studies related to retention in the last year--compiling and examining institutional records (68 percent), interviewing selected students (62 percent), and conducting a survey of students (54 percent). However, institutions varied in the type of data collected. Less than 70 percent of institutions could provide data on retention rates separately by racial/ethnic categories.

Four-fifths of institutions instituted changes in their programs during the past 5 years with the intention of increasing retention. Most institutions (58 percent) did not expect changes in attrition of more than 10 percent over the next 5 years, but 39 percent did predict a decrease of at least 10 percent.

# Appendix A

# Detailed Tables

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Table A-1. Percentage of higher education institutions that were able to provide statistics on retention for selected racial/ethnic categories, by institutional characteristic: United States

| Institutional characteristic | Freshmen in fall 1988 who were enrolled in fall 1989 | | | Freshmen in fall 1984 who completed bachelor's degree by 1989-90 | | |
|---|---|---|---|---|---|---|
| | Total | Black | Hispanic | Total | Black | Hispanic |
| Total* | 83 | 69 | 67 | 87 | 68 | 67 |
| Type | | | | | | |
| Doctoral | 92 | 75 | 70 | 85 | 77 | 75 |
| Comprehensive | 86 | 69 | 68 | 79 | 60 | 56 |
| Baccalaureate | 92 | 78 | 78 | 87 | 70 | 70 |
| Two-year | 72 | 62 | 59 | -- | -- | -- |
| Control | | | | | | |
| Public | 73 | 62 | 58 | 77 | 66 | 61 |
| Private | 93 | 77 | 75 | 91 | 69 | 70 |
| Enrollment size | | | | | | |
| Less than 1,000 | 89 | 77 | 74 | 90 | 70 | 70 |
| 1,000 - 4,999 | 74 | 60 | 58 | 85 | 66 | 66 |
| 5,000 or more | 85 | 70 | 66 | 82 | 69 | 63 |
| Region | | | | | | |
| Northeast | 90 | 72 | 69 | 90 | 73 | 73 |
| Central | 91 | 75 | 73 | 89 | 62 | 62 |
| Southeast | 85 | 80 | 75 | 87 | 81 | 78 |
| West | 65 | 49 | 49 | 78 | 52 | 52 |

-- Too few cases for a reliable estimate.

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-2. Retention and transfer rates at higher education institutions, by institutional characteristic: United States

| Institutional characteristic | Freshmen in fall 1988 who were enrolled in fall 1989 | Freshmen in fall 1984 who completed bachelor's degree by 1989-90 | Freshmen who ultimately graduate from institution[1] | | First entered institution through transfer |
|---|---|---|---|---|---|
| | | | Comparable to preceding column[2] | All institutions | |
| | (percent of full-time, first-time freshmen) | | | | (percent) |
| Total[3] | 70 | 49 | 53 | 48 | 16 |
| Type | | | | | |
| Doctoral | 81 | 57 | 59 | 59 | 16 |
| Comprehensive | 74 | 42 | 47 | 48 | 19 |
| Baccalaureate | 75 | 51 | 53 | 52 | 12 |
| Two-year | 58 | -- | -- | 33 | 16 |
| Control | | | | | |
| Public | 68 | 45 | 50 | 44 | 18 |
| Private | 76 | 56 | 61 | 60 | 12 |
| Enrollment size | | | | | |
| Less than 1,000 | 63 | 35 | 46 | 44 | 15 |
| 1,000 - 4,999 | 66 | 51 | 55 | 45 | 17 |
| 5,000 or more | 74 | 50 | 53 | 50 | 16 |
| Region | | | | | |
| Northeast | 76 | 56 | 61 | 54 | 11 |
| Central | 69 | 52 | 55 | 52 | 15 |
| Southeast | 68 | 42 | 48 | 43 | 18 |
| West | 66 | 44 | 51 | 44 | 21 |

-- Too few cases for a reliable estimate.

[1]This measure was typically based on estimates, rather than precise statistics. It is retained because it received a higher response rate than the 6-year baccalaureate completion rate. Respondents include schools granting 2-year degrees as well as those granting baccalaureate degrees.

[2]Calculated only for schools for which a 6-year baccalaureate completion rate was available. Does not include schools granting only 2-year degrees.

[3]Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-3. Percentage of officials at higher education institutions who perceived various factors as very important reasons why their students leave without completing a degree or award, by institutional characteristic: United States

| Institutional characteristic | Academic interests better met elsewhere | Institutional social/ cultural environment | Racial/ ethnic group relations | Location of institution | Financial difficulties of student | Poor academic progress | Objectives of student accomplished | Other personal reasons |
|---|---|---|---|---|---|---|---|---|
| Total* | 13 | 8 | 3 | 6 | 38 | 25 | 30 | 29 |
| Type | | | | | | | | |
| Doctoral | 15 | 5 | 4 | 1 | 43 | 34 | 2 | 32 |
| Comprehensive | 15 | 14 | 7 | 7 | 43 | 30 | 3 | 35 |
| Baccalaureate | 14 | 9 | 4 | 11 | 48 | 28 | 6 | 20 |
| Two-year | 11 | 4 | 2 | 6 | 31 | 24 | 54 | 37 |
| Control | | | | | | | | |
| Public | 11 | 4 | 4 | 7 | 29 | 26 | 46 | 35 |
| Private | 15 | 11 | 3 | 6 | 46 | 25 | 15 | 24 |
| Enrollment size | | | | | | | | |
| Less than 1,000 | 13 | 10 | 1 | 8 | 40 | 27 | 31 | 25 |
| 1,000 - 4,999 | 14 | 6 | 4 | 4 | 34 | 19 | 34 | 30 |
| 5,000 or more | 14 | 3 | 10 | 5 | 42 | 36 | 14 | 41 |
| Region | | | | | | | | |
| Northeast | 15 | 10 | 5 | 4 | 41 | 26 | 19 | 40 |
| Central | 18 | 7 | 3 | 10 | 39 | 25 | 33 | 27 |
| Southeast | 12 | 5 | 2 | 7 | 34 | 29 | 30 | 26 |
| West | 7 | 9 | 3 | 3 | 36 | 20 | 38 | 25 |

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-4. Percentage of higher education institutions that performed studies of retention by institutional characteristic: United States

| Institutional characteristic | Studies performed in last year | | | Kinds of analyses performed | | |
|---|---|---|---|---|---|---|
| | Examined institutional records | Conducted survey of students | Interviewed selected students | Determine overall retention patterns | Predict students needing attention | Examine effect of programs |
| Total* | 68 | 54 | 62 | 80 | 72 | 62 |
| Type | | | | | | |
| Doctoral | 93 | 46 | 58 | 94 | 63 | 64 |
| Comprehensive | 76 | 52 | 61 | 92 | 68 | 54 |
| Baccalaureate | 68 | 53 | 73 | 84 | 67 | 45 |
| Two-year | 64 | 57 | 57 | 79 | 78 | 72 |
| Control | | | | | | |
| Public | 67 | 49 | 50 | 80 | 77 | 62 |
| Private | 69 | 58 | 74 | 81 | 68 | 62 |
| Enrollment size | | | | | | |
| Less than 1,000 | 60 | 57 | 63 | 73 | 72 | 63 |
| 1,000 - 4,999 | 73 | 51 | 64 | 86 | 74 | 62 |
| 5,000 or more | 83 | 50 | 53 | 93 | 69 | 55 |
| Region | | | | | | |
| Northeast | 79 | 46 | 69 | 92 | 66 | 65 |
| Central | 59 | 60 | 63 | 74 | 80 | 54 |
| Southeast | 70 | 62 | 66 | 81 | 71 | 65 |
| West | 66 | 46 | 51 | 76 | 71 | 63 |

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-5. Admissions policies of higher education institutions by institutional characteristic: United States

| Institutional characteristic | Have open admissions | | | Admissions policies for students not receiving open admissions | | | | |
|---|---|---|---|---|---|---|---|---|
| | For all students | For some students | For no students | Sometimes waive standards | Set to assure academic success | Consider nonacademic factors | Accept marginal students | Used to increase retention |
| | (percent) | | | | | | | |
| Total* | 39 | 20 | 41 | 48 | 90 | 57 | 76 | 82 |
| Type | | | | | | | | |
| Doctoral | 1 | 15 | 84 | 65 | 94 | 49 | 68 | 87 |
| Comprehensive | 12 | 20 | 69 | 66 | 96 | 49 | 80 | 86 |
| Baccalaureate | 11 | 23 | 67 | 47 | 85 | 65 | 72 | 82 |
| Two-year | 76 | 13 | 11 | -- | -- | -- | -- | -- |
| Control | | | | | | | | |
| Public | 63 | 16 | 21 | 59 | 91 | 32 | 85 | 79 |
| Private | 16 | 23 | 16 | 43 | 90 | 68 | 73 | 83 |
| Enrollment size | | | | | | | | |
| Less than 1,000 | 39 | 24 | 36 | 38 | 86 | 60 | 79 | 80 |
| 1,000 - 4,999 | 44 | 14 | 43 | 51 | 95 | 63 | 74 | 83 |
| 5,000 or more | 25 | 19 | 56 | 70 | 93 | 37 | 75 | 84 |
| Region | | | | | | | | |
| Northeast | 25 | 20 | 55 | 45 | 93 | 71 | 74 | 80 |
| Central | 31 | 27 | 42 | 46 | 94 | 58 | 78 | 89 |
| Southeast | 44 | 20 | 35 | 48 | 91 | 38 | 86 | 83 |
| West | 55 | 10 | 35 | 55 | 80 | 64 | 63 | 70 |

-- Too few cases for a reliable estimate.

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-6. Retention rates and undergraduate admissions processes at higher education institutions: United States

| Admissions process | Freshmen in fall 1988 who were enrolled in fall 1989 | Freshmen in fall 1984 who completed bachelor's degree by 1989-90 | Freshmen who ultimately graduate from institution |
|---|---|---|---|
| | (percentage of full-time, first-time freshmen) | | |
| Total | 70 | 49 | 48 |
| **Type of admissions** | | | |
| Open admissions for all students | 56 | -- | 32 |
| Open admissions for some students | 73 | 40 | 48 |
| No open admissions | 78 | 53 | 57 |
| **Procedures at institutions without open admissions for all students** | | | |
| Sometimes waive admissions standards | | | |
| Yes | 78 | 50 | 54 |
| No | 75 | 50 | 55 |
| Set standards to assure academic success | | | |
| Yes | 77 | 51 | 55 |
| No | -- | -- | -- |
| Consider nonacademic factors | | | |
| Yes | 79 | 56 | 59 |
| No | 75 | 45 | 51 |
| Accept marginal students | | | |
| Yes | 76 | 48 | 53 |
| No | 79 | 57 | 59 |
| Try to increase retention through admissions | | | |
| Yes | 78 | 52 | 55 |
| No | 72 | 44 | 49 |

-- Too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-7. Selectivity and retention at higher education institutions: United States

| Selectivity | Freshmen in fall 1988 who were enrolled in fall 1989 | Freshmen in fall 1984 who completed bachelor's degree by 1989-90 | Freshmen who ultimately graduate from institution |
|---|---|---|---|
| | | (percent of full-time, first-time freshmen) | |
| Mean SAT score (verbal) of entering freshmen | | | |
| Below median | 70 | 37 | 42 |
| Above median | 84 | 62 | 64 |
| Mean SAT score (math) of entering freshmen | | | |
| Below median | 70 | 34 | 40 |
| Above median | 82 | 60 | 62 |
| Mean composite ACT score of entering freshmen | | | |
| Below median | 62 | 32 | 37 |
| Above median | 76 | 51 | 55 |
| Percentage of entering freshmen in top 25% of high school class | | | |
| Below median | 65 | 32 | 38 |
| Above median | 79 | 55 | 58 |
| Mean high school grade point average | | | |
| Below median | 66 | 35 | 37 |
| Above median | 79 | 51 | 55 |
| Regression to estimate retention rates | | | |
| Intercept | .65 | .32 | .46 |
| (standard error) | (.02) | (.04) | (.03) |
| Open admission for all | -.07 | -.03 | -.09 |
| (standard error) | (.03) | (.06) | (.04) |
| Percent rejected for admissions | .35 | .61 | .30 |
| (standard error) | (.07) | (.11) | (.11) |
| $R^2$ | .29 | .25 | .17 |

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-8. Institutional programs that may have an impact on retention, by type of programs: United States

| Institutional program | Percent with program | Mean number of staff | Mean percent of students involved | Official's perceptions of impact on retention | | |
|---|---|---|---|---|---|---|
| | | | | Great | Some | None |
| | | | | (percent) | | |
| Admissions program to improve student match | 67 | 9 | 67 | 36 | 62 | 3 |
| Testing/performance assessment | 83 | 6 | 78 | 41 | 55 | 4 |
| Help with academic difficulties | 97 | 18 | 42 | 54 | 46 | 0 |
| Help with personal issues | 89 | 7 | 31 | 35 | 63 | 2 |
| Help with finances | 100 | 6 | 60 | 64 | 35 | 1 |
| Help with multi-racial and -ethnic environment | 52 | 6 | 19 | 29 | 67 | 3 |
| Identification of those likely to leave | 48 | 10 | 31 | 17 | 78 | 5 |
| Career guidance | 91 | 5 | 49 | 30 | 69 | 2 |

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-9. Percentage of institutions with various programs that might affect retention, by institutional characteristic: United States

| Institutional characteristic | Admissions program to improve student match | Testing/ performance assessment | Help with academic difficulties | Help with personal issues | Help with finances | Help with multi-racial and -ethnic environment | Identification of those likely to leave | Career guidance |
|---|---|---|---|---|---|---|---|---|
| Total* | 67 | 83 | 97 | 89 | 100 | 52 | 48 | 91 |
| Type | | | | | | | | |
| Doctoral | 84 | 84 | 99 | 99 | 100 | 89 | 42 | 100 |
| Comprehensive | 68 | 88 | 96 | 96 | 98 | 79 | 43 | 94 |
| Baccalaureate | 80 | 82 | 95 | 94 | 100 | 54 | 54 | 92 |
| Two-year | 52 | 92 | 98 | 83 | 100 | 45 | 48 | 91 |
| Control | | | | | | | | |
| Public | 54 | 96 | 98 | 90 | 99 | 59 | 42 | 95 |
| Private | 79 | 71 | 96 | 89 | 100 | 45 | 54 | 88 |
| Enrollment size | | | | | | | | |
| Less than 1,000 | 64 | 75 | 96 | 84 | 100 | 34 | 50 | 85 |
| 1,000 - 4,999 | 72 | 91 | 99 | 94 | 100 | 62 | 49 | 97 |
| 5,000 or more | 61 | 93 | 96 | 95 | 98 | 89 | 41 | 98 |
| Region | | | | | | | | |
| Northeast | 82 | 80 | 93 | 86 | 99 | 58 | 50 | 90 |
| Central | 69 | 76 | 99 | 94 | 100 | 46 | 60 | 95 |
| Southeast | 66 | 87 | 99 | 85 | 100 | 50 | 52 | 86 |
| West | 51 | 90 | 95 | 91 | 100 | 55 | 31 | 94 |

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-10. Percentage of officials reporting that various programs had a great impact on retention, by institutional characteristic: United States

| Institutional characteristic | Admissions program to improve student match | Testing/ performance assessment | Help with academic difficulties | Help with personal issues | Help with finances | Help with multi-racial and -ethnic environment | Identification of those likely to leave | Career guidance |
|---|---|---|---|---|---|---|---|---|
| Total* | 36 | 41 | 54 | 35 | 64 | 29 | 17 | 30 |
| Type | | | | | | | | |
| Doctoral | 25 | 25 | 50 | 31 | 77 | 24 | -- | 22 |
| Comprehensive | 28 | 32 | 44 | 26 | 58 | 21 | 14 | 15 |
| Baccalaureate | 40 | 37 | 54 | 28 | 70 | 32 | 18 | 22 |
| Two-year | 31 | 48 | 61 | 41 | 61 | 28 | 18 | 37 |
| Control | | | | | | | | |
| Public | 30 | 43 | 55 | 37 | 65 | 28 | 20 | 28 |
| Private | 39 | 39 | 53 | 33 | 64 | 31 | 15 | 31 |
| Enrollment size | | | | | | | | |
| Less than 1,000 | 40 | 45 | 51 | 37 | 63 | 31 | 17 | 30 |
| 1,000 - 4,999 | 33 | 41 | 58 | 33 | 64 | 31 | 15 | 32 |
| 5,000 or more | 26 | 28 | 50 | 36 | 69 | 23 | 22 | 19 |
| Region | | | | | | | | |
| Northeast | 45 | 40 | 63 | 36 | 59 | 22 | 19 | 32 |
| Central | 41 | 38 | 44 | 39 | 65 | 29 | 17 | 34 |
| Southeast | 23 | 46 | 53 | 25 | 59 | 30 | 15 | 23 |
| West | 35 | 39 | 57 | 42 | 74 | 36 | 18 | 30 |

-- Too few cases for a reliable estimate.

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

Table A-11. Changes in programs designed to increase retention, and officials' expectations of changes in attrition rates, by institutional characteristic: United States

| Institutional characteristic | Percent changing programs over last 5 years | Areas in which programs were changed | | | | | | | | Attrition over next 5 years | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Admissions program to improve student match | Testing/ performance assessment | Help with academic difficulties | Help with personal issues | Help with finances | Help with multi-racial and -ethnic environment | Identification of those likely to leave | Career guidance | Decrease at least 10 percent | No change | Increase at least 10 percent |
| Total* | 81 | 68 | 77 | 91 | 70 | 74 | 46 | 55 | 73 | 39 | 58 | 3 |
| Type | | | | | | | | | | | | |
| Doctoral | 78 | 76 | 70 | 95 | 76 | 73 | 85 | 51 | 66 | 18 | 79 | 3 |
| Comprehensive | 75 | 72 | 80 | 90 | 79 | 71 | 76 | 49 | 75 | 38 | 60 | 2 |
| Baccalaureate | 85 | 69 | 68 | 92 | 75 | 80 | 49 | 63 | 77 | 47 | 52 | 1 |
| Two-year | 87 | 63 | 87 | 89 | 59 | 69 | 35 | 53 | 75 | 42 | 52 | 5 |
| Control | | | | | | | | | | | | |
| Public | 86 | 62 | 91 | 94 | 62 | 69 | 54 | 57 | 76 | 44 | 52 | 4 |
| Private | 77 | 76 | 62 | 87 | 79 | 80 | 36 | 54 | 70 | 34 | 64 | 2 |
| Enrollment size | | | | | | | | | | | | |
| Less than 1,000 | 79 | 67 | 74 | 88 | 71 | 75 | 29 | 57 | 70 | 38 | 59 | 3 |
| 1,000 - 4,999 | 83 | 69 | 78 | 91 | 67 | 72 | 52 | 54 | 77 | 42 | 54 | 4 |
| 5,000 or more | 81 | 73 | 84 | 97 | 76 | 75 | 87 | 54 | 72 | 34 | 64 | 2 |
| Region | | | | | | | | | | | | |
| Northeast | 81 | 68 | 68 | 92 | 75 | 74 | 54 | 52 | 69 | 32 | 67 | 1 |
| Central | 75 | 82 | 78 | 95 | 75 | 84 | 44 | 71 | 78 | 36 | 60 | 4 |
| Southeast | 88 | 65 | 78 | 84 | 68 | 67 | 36 | 60 | 73 | 41 | 55 | 4 |
| West | 81 | 60 | 83 | 92 | 64 | 72 | 52 | 37 | 73 | 47 | 50 | 2 |

*Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey on Retention at Higher Education Institutions (HES 14), U.S. Department of Education, 1991 (survey conducted in 1990).

# Appendix B

# Technical Notes

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## Higher Education Surveys

The Higher Education Surveys (HES) system was established to conduct brief surveys of higher education institutions on topics of interest to Federal policy makers and the education community. The system is sponsored by the National Science Foundation, the U.S. Department of Education, and the National Endowment for the Humanities.

HES questionnaires typically request a limited amount of readily accessible data from a subsample of institutions in the HES panel, which is a nationally representative sample of 1,093 colleges and universities in the United States. Each institution in the panel has identified a HES campus representative, who serves as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and distributing the questionnaire to that person.

## Survey Methodology

This mail survey was conducted at the request of the U.S. Department of Education in order to provide a current picture of the performance of institutions in retaining their students, and to help in the development of strategies that may assist the higher education community to reduce dropouts.

The sample for this survey consisted of half of the HES panel, resulting in a mailing to 541 institutions. The questionnaire was mailed on July 18, 1990, and telephone followup for nonresponse was begun on August 12, 1990. Completed questionnaires were examined for internal inconsistencies or missing data, with telephone followup to verify the information in question. Data collection ended on November 9, 1990. Data were adjusted for questionnaire nonresponse and weighted to national totals. Institutions that do not accept freshmen were excluded from the analysis.

The overall response rate was 87 percent, based on 428 responses from 497 eligible institutions. The response rates were 83 percent for private institutions, 89 percent for public institutions, and by type of institution ranged from 70 percent at specialized institutions to 92 percent at doctoral institutions.

The weighted item response rates for all questions on the questionnaire are provided in Appendix Table B-1. In general, item response rates were worst for retention rates (and particularly for breakdowns by race/ethnicity category) and for some measures of selectivity (e.g., the mean high school grade point average). Analyses of these measures have intentionally been limited because of the lower reliability of these statistics. Item response rates for most other questionnaire items were generally high, and may be interpreted as accurately representing the responses of the sampled institutions.

Several items on the questionnaire asked for respondents' opinions rather than obtaining numeric measures of such items as program impacts or the reasons why students leave without completing a degree or awards. This choice was made to limit respondent burden and because numeric data often were not available. Opinion data may be biased if the respondents wish to promote a particular viewpoint concerning retention, or if they are simply mistaken in a systematic manner in their impressions. Also, to limit respondent burden, respondents were asked to provide their best estimates if their institutions did not keep records on all questionnaire items. However, in many cases the survey responses will represent the only existing data regarding certain issues and, hence, are valuable even given these limitations.

Table B-1. Response rate for each item on the retention practices questionnaire: United States

| Question number | Description | Response rate | |
|---|---|---|---|
| | | Unweighted | Weighted |
| 1 | Reasons for attrition | 94 | 96 |
| 2 | Description of admissions policy | 94 | 95 |
| 3 | Institutional studies of retention | 99 | 100 |
| | Institutional analyses of retention data | 99 | 98 |
| 4 | Existence of programs that might affect retention | 97 | 99 |
| | Number of staff in programs | 76-87 | 84-93 |
| | Percent of full-time students involved | 72-85 | 81-91 |
| | Impact of program on retention | 85-91 | 90-95 |
| 5 | Receipt of Federal Student Support Services Grant | 99 | 100 |
| | Dollar amount of grant | 94 | 95 |
| | Services funded through grant | 93 | 94 |
| | Number of students affected by grant | 77-86 | 80-89 |
| 6a | Entering freshmen in fall 1988, total | 90 | 89 |
| | Still enrolled in fall 1989, total | 84 | 83 |
| | Entering freshmen in fall 1988, by race/ethnicity | 72-79 | 74-78 |
| | Still enrolled in fall 1989, by race/ethnicity | 64-70 | 67-70 |
| 6b | Entering freshmen in fall 1987, total | 73 | 76 |
| | Completed associate degree by 1989-90, total | 65 | 71 |
| | Entering freshmen in fall 1987, by race/ethnicity | 57-60 | 60-63 |
| | Completed associate degree, by race/ethnicity | 51-53 | 54-56 |
| 6c | Entering freshmen in fall 1984, total | 90 | 91 |
| | Completed bachelor's degree by 1989-90, total | 84 | 87 |
| | Entering freshmen in fall 1984, by race/ethnicity | 69-77 | 70-74 |
| | Completed bachelor's degree, by race/ethnicity | 64-71 | 68-71 |
| 7 | Percent who ultimately graduate | 91 | 92 |
| 8 | Percent that entered as transfer students, total | 80 | 83 |
| | Percent, by race/ethnicity | 61-64 | 63-67 |

Table B-1. Response rate for each item on the retention practices questionnaire: United States (continued)

| Question number | Description | Response rate | |
|---|---|---|---|
| | | Unweighted | Weighted |
| 9a | Enrolled in 1988-89, total | 88 | 88 |
| | Completed degree in 1988-89, total | 76 | 77 |
| | Did not continue in 1989-90, total | 62 | 67 |
| | Enrolled in 1988-89, by race/ethnicity | 72-76 | 73-75 |
| | Completed degree in 1988-89, by race/ethnicity | 62-65 | 64-66 |
| | Did not continue in 1989-90, by race/ethnicity | 49-52 | 53-54 |
| 9b | Reasons for not being enrolled in 1989-90 | 90 | 92 |
| 10 | New or modified programs to increase retention | 100 | 100 |
| | Areas involved | 95-98 | 96-98 |
| | Changes anticipated in retention | 98 | 100 |
| 11 | Information about admissions | 90-92 | 88-91 |
| 12 | Have SAT (ACT) scores | 88-91 | 88-90 |
| | Average SAT (ACT) scores | 49-53 | 44-45 |
| | Percent in top 25% in high school | 62 | 60 |
| | High school grade point average | 48 | 46 |
| 13 | Number of students in fall 1989, total | 97 | 97 |
| | Number of students, by race/ethnicity | 84-88 | 87-90 |
| | Number of students, by gender | 93 | 93 |
| | Percent receiving aid | 90 | 89-92 |
| | Percent living on campus | 96 | 96 |
| | Percent enrolled full time | 96 | 96 |
| 14 | Location of campus | 100 | 100 |
| | Percent who attend graduate schools | 66 | 69 |

SOURCE: Higher Education Surveys, Survey of Retention at Higher Education Institutions (HES 14), National Science Foundation, 1991 (survey conducted in 1990).

## Reliability of Survey Estimates

The findings presented in this report are estimates based on the sample from the HES panel and, consequently, are subject to sampling variability. If the questionnaire had been sent to a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower. The standard error is a measure of the variability due to sampling when estimating a statistic. It indicates how much variability there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated overall 1-year retention rate is 69.7 percent and the estimated standard error is 1.0. The 95 percent confidence interval for this statistic extends from 69.7 - (1.0 times 1.96) to 69.7 + (1.0 times 1.96), or from 67.7 to 71.7 percent. This means one can be 95 percent confident that this interval contains the true population value. Estimates of standard errors for the estimates were computed using a replication technique known as jackknife replication. Some key statistics and their estimated standard errors are shown in Appendix Table B-2.

For categorical data, relationships between variables with two or more levels have been tested in a two-way analysis, using chi-square tests at the .05 level of significance, adjusted for average design effect. If the overall chi-square test was significant, it was followed with tests using a Bonferroni t statistic, which maintained an overall 95 percent confidence level or better. Unless noted otherwise, all comparisons made in this report were statistically significant using these tests.

In some cases, only a small number of sampled institutions responded to a particular questionnaire item. Such cases are noted in the appendix tables. All estimates provided in this report are based on more than 25 responding institutions.

Survey estimates are also subject to errors of reporting and errors made in the collection of the data. These errors, called nonsampling errors, can sometimes bias the data. While general sampling theory can be used to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and usually require that an experiment be conducted as part of the data collection procedures or the use of data external to the study.

Nonsampling errors may include such factors as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. During the design of the survey and survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire was pretested with respondents like those who completed the survey, and the questionnaire and instructions were extensively reviewed by the Office of the Under Secretary in the U.S. Department of Education. Manual and machine editing of the questionnaires were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone; data were keyed with 100 percent verification.

Table B-2. Selected standard errors by institutional characteristic: United States

| Institutional characteristic | Percent reporting student finances were very important in students leaving early | | Percent with programs to improve student match | | Percent of freshmen entering in fall 1988 who were enrolled in fall 1989 | | Percentage reporting testing/ performance assessment had great impact on retention[1] | | Percentage reporting poor academic progress was very important in students leaving early | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Estimate | Standard error | Estimate | Standard error | Estimate | Standard error | Estimate | Standard error | Estimate | Standard error |
| Total[2] | 37.8 | 3.0 | 66.8 | 3.2 | 69.7 | 1.0 | 41.2 | 3.4 | 25.1 | 2.4 |
| Type | | | | | | | | | | |
| Doctoral | 42.6 | 5.7 | 84.4 | 4.6 | 81.0 | 1.6 | 25.1 | 6.0 | 34.0 | 6.6 |
| Comprehensive | 43.5 | 5.2 | 67.6 | 4.6 | 73.7 | 1.0 | 31.9 | 5.2 | 30.1 | 5.1 |
| Baccalaureate | 48.5 | 4.9 | 80.3 | 4.0 | 75.4 | 1.4 | 37.0 | 5.7 | 27.6 | 4.5 |
| Two-year | 31.0 | 4.2 | 52.0 | 5.1 | 57.6 | 1.9 | 48.2 | 5.0 | 23.6 | 4.0 |
| Control | | | | | | | | | | |
| Public | 28.7 | 2.7 | 53.9 | 3.9 | 67.7 | 1.2 | 43.2 | 4.3 | 25.7 | 3.1 |
| Private | 46.0 | 4.9 | 79.1 | 4.2 | 75.8 | 1.4 | 38.8 | 5.0 | 24.5 | 3.5 |
| Enrollment size | | | | | | | | | | |
| Less than 1,000 | 39.8 | 5.1 | 64.2 | 5.0 | 63.5 | 1.9 | 45.5 | 5.9 | 26.7 | 4.1 |
| 1,000 - 4,999 | 33.9 | 3.6 | 71.8 | 3.6 | 66.3 | 1.9 | 40.7 | 4.9 | 19.5 | 3.3 |
| 5,000 or more | 41.6 | 4.4 | 61.2 | 4.0 | 74.5 | 1.6 | 28.0 | 4.1 | 36.3 | 4.4 |
| Region | | | | | | | | | | |
| Northeast | 41.4 | 7.2 | 82.2 | 5.0 | 76.0 | 1.9 | 40.3 | 6.0 | 26.3 | 6.3 |
| Central | 39.5 | 5.7 | 69.0 | 5.1 | 68.7 | 2.2 | 38.3 | 6.7 | 24.9 | 4.9 |
| Southeast | 34.4 | 5.2 | 66.2 | 6.0 | 68.3 | 1.8 | 46.1 | 6.7 | 28.9 | 5.7 |
| West | 36.4 | 5.8 | 50.9 | 6.0 | 66.0 | 2.8 | 39.0 | 5.4 | 19.7 | 3.6 |

[1]Percentages are based on those institutions that had testing/performance assessment programs.

[2]Includes specialized institutions. Specialized institutions are not listed separately because there are too few cases for a reliable estimate.

SOURCE: Higher Education Surveys, Survey of Retention at Higher Education Institutions (HES 14), National Science Foundation, 1991 (survey conducted in 1990).

## School Type Relationships

The data in this report are presented as "total" figures, which represent all kinds of schools grouped together, and for schools broken down by school control and school "type." These classifications are as follows:

- School control
  - Public
  - Private
- School type (based on the U.S. Department of Education's HEGIS classifications)
  - Doctorate-granting: schools characterized by a significant level and breadth of activity in a commitment to doctoral-level education as measured by the number of doctorate recipients and the diversity in doctoral-level program offerings.
  - Comprehensive: schools characterized by diverse postbaccalaureate programs (including first-professional) but which do not engage in significant doctoral-level education.
  - Baccalaureate: schools characterized by their primary emphasis on general undergraduate, baccalaureate-level education, and which are not significantly engaged in postbaccalaureate education.
  - Specialized: baccalaureate or postbaccalaureate schools characterized by a programmatic emphasis in one area (plus closely related specialties), as measured by the percentage of degrees granted in the program area. Some examples of specialized schools are medical schools, law schools, and seminaries. Because many specialized schools did not have undergraduate programs, the total number of specialized schools responding (23) was too low to produce reliable national estimates. Therefore, specialized schools have been included in the overall totals (so that overall national estimates will reflect all types of institutions), but no statistics have been reported for specialized schools separately.
  - Two-year: schools that confer at least 75 percent of their degrees and awards for work below the bachelor's levels.

These school characteristics are related to each other. For example :

- Among doctoral schools, 64 percent are public.
- Among comprehensive schools, 61 percent are public.
- Among baccalaureate schools, 84 percent are private.
- Among 2-year institutions, 71 percent are public.
- Among public schools, 65 percent are 2-year.

- Among private schools, 38 percent are baccalaureate.
- Among schools in the Northeast, 61 percent are private.
- Among schools in the West, 65 percent are public.
- Among large schools, 87 percent are public.
- Among small schools, 71 percent are private.

# Appendix C

# Survey Questionnaire

Higher Education Surveys

OMB # 3145-0009
Exp. 1/31/91

SURVEY #14
SURVEY ON RETENTION PRACTICES OF HIGHER EDUCATION INSTITUTIONS

July 1990

Dear Colleague:

I am writing on behalf of the U.S. Department of Education to request your participation in the Higher Education Survey (HES) on retention practices.

Attrition of college students has always been high, and recent evidence shows that the retention problem is worsening. The purpose of this survey is to provide a current picture of the performance of institutions in retaining their students, and to help in the development of strategies that may assist the higher education community to reduce dropouts. The completion of the questionnaire should take approximately 1 hour. Your participation in this survey, while voluntary, is vital to the development of reliable national estimates concerning retention strategies.

Because many institutions consider retention data to be highly sensitive, I wish to emphasize that your institution's responses will be kept strictly confidential, and that all information published from this survey will be in aggregated form only.

Thank you for your assistance.

Sincerely,

Alan Ginsburg
Director, Planning and Evaluation Service

Sponsored by the National Science Foundation, the National Endowment for the Humanities, and the Department of Education

NOTE: Please answer only for undergraduate students enrolled fulltime at your institution. If your institution does not keep records on all of these items, please provide your best estimate.

1. For those students that leave your institution without completing a degree or award, how important is each of the following in their choice to leave?

| | Very | Moderate | Little | Not at all |
|---|---|---|---|---|
| Academic interests of student better met elsewhere | ☐ | ☐ | ☐ | ☐ |
| Institutional social/cultural environment | ☐ | ☐ | ☐ | ☐ |
| Racial/ethnic group relations (for minority students) | ☐ | ☐ | ☐ | ☐ |
| Location of institution | ☐ | ☐ | ☐ | ☐ |
| Financial difficulties of student | ☐ | ☐ | ☐ | ☐ |
| Poor academic progress of student | ☐ | ☐ | ☐ | ☐ |
| Objectives of student have been accomplished | ☐ | ☐ | ☐ | ☐ |
| Other personal reasons of student | ☐ | ☐ | ☐ | ☐ |
| Other (please specify) _____ | ☐ | ☐ | ☐ | ☐ |

2. Please describe your institution's admissions policy.

☐ If you accept all students who apply (open admissions), check here and skip to question 3a.
☐ If you have open admissions for some students (e.g., in-state students), check here and answer the remaining items for those students for whom you do not have open admissions.

| | Yes | No |
|---|---|---|
| We sometimes waive our admissions standards for certain students | ☐ | ☐ |
| We set admissions standards so that students who meet them can succeed academically | ☐ | ☐ |
| As a general policy, we consider nonacademic factors (such as a student's "fit" with the institution) when deciding on admissions | ☐ | ☐ |
| We accept marginal students with the intention of providing the support that they need to continue | ☐ | ☐ |
| We try to increase retention through our admissions decisions | ☐ | ☐ |

3a. How recently has your institution performed each of the following to examine retention?

| | In last year | In last 2 to 3 years | In last 4 to 5 years | Not in last 5 years |
|---|---|---|---|---|
| Compiled/examined institutional records | ☐ | ☐ | ☐ | ☐ |
| Conducted survey of students | ☐ | ☐ | ☐ | ☐ |
| Interviewed selected students (e.g., exit interviews) | ☐ | ☐ | ☐ | ☐ |

3b. What kinds of analyses have you performed based on any retention data you have collected?

| | Yes | No |
|---|---|---|
| Determine overall retention patterns | ☐ | ☐ |
| Attempt to predict students needing special attention | ☐ | ☐ |
| Examine effect on retention of particular programs | ☐ | ☐ |

4. Please indicate whether your institution has each of the programs listed below (whether or not the program is specifically directed towards influencing student retention). For those programs that you have, state the total number of staff (both full-time and part-time) assigned to the programs and the percentage of all full-time students who are involved at some point in their academic careers. Finally, evaluate the program in terms of its effect on influencing participating students to maintain their enrollment at your institution.

| | Have program | | Number of staff | Percent of full-time students | Impact on retention for participating students | | |
|---|---|---|---|---|---|---|---|
| | Yes | No | | | Great | Some | None |
| Admissions programs to improve student match with college (e.g., on-campus interviews, alumni recruiting) | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Testing/performance assessment to monitor students' progress or place them in courses (e.g., aptitude testing) | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Help for students with academic difficulties (e.g., remedial courses, academic advising, mentoring, identifying at-risk students, introductory summer program) | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Help for students with personal issues (e.g., personal counseling, child care) | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Help with student finances (e.g., on-campus employment, financial aid) | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Help with problems arising from a multi-racial and -ethnic environment | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Identification of students likely to leave | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |
| Career guidance | ☐ | ☐ | _____ | _____ | ☐ | ☐ | ☐ |

5a. Does your institution have a Federal Student Support Services Grant? (These grants are part of the Trio Program within Title IV, and are designed to provide aid to low-income, first-generation American, and physically disabled students.)

Yes ☐
No ☐

5b. If so, what is the dollar amount of the grant?

Amount of grant $_____

5c. Which of the following services were at least partially funded through the grant, and how many students were affected by the grant for each service?

| | Funded | | Number of students |
|---|---|---|---|
| | Yes | No | |
| Academic, financial, or personal counseling | ☐ | ☐ | _____ |
| Assistance with enrollment and application processes to high school or college, or graduate/professional programs | ☐ | ☐ | _____ |
| Instruction/tutorial services | ☐ | ☐ | _____ |
| Career guidance/widen career options | ☐ | ☐ | _____ |
| Information for students or community on higher education opportunities | ☐ | ☐ | _____ |

When providing information on race and ethnicity, list non-resident aliens only on the line provided. Do not provide racial or ethnic backgrounds for them.

6. Please provide the following information about your institution's retention rates.

a. Entering full-time freshmen in Fall 1988 who were enrolled (either fulltime or parttime) in Fall 1989

| | Entered in Fall 1988 | Still enrolled in Fall 1989 |
|---|---|---|
| Total number | _____ | _____ |
| White, non-Hispanic | _____ | _____ |
| Black, non-Hispanic | _____ | _____ |
| Hispanic | _____ | _____ |
| Asian or Pacific Islander | _____ | _____ |
| American Indian or Alaskan Native | _____ | _____ |
| Non-resident alien | _____ | _____ |

b. Entering full-time freshmen in Fall 1987 who completed associate degree program by 1989-90

☐ Check here if your institution does not offer an associate degree, and skip to question 6c.

| | Entered in Fall 1987 | Completed associate degree by 1989-90 |
|---|---|---|
| Total number | _____ | _____ |
| White, non-Hispanic | _____ | _____ |
| Black, non-Hispanic | _____ | _____ |
| Hispanic | _____ | _____ |
| Asian or Pacific Islander | _____ | _____ |
| American Indian or Alaskan Native | _____ | _____ |
| Non-resident alien | _____ | _____ |

c. Entering full-time freshmen in Fall 1984 who completed bachelor's degree by 1989-90

☐ Check here if your institution does not offer a bachelor's degree, and skip to question 7.

| | Entered in Fall 1984 | Completed bachelor's degree by 1989-90 |
|---|---|---|
| Total number | _____ | _____ |
| Black, non-Hispanic | _____ | _____ |
| White, non-Hispanic | _____ | _____ |
| Hispanic | _____ | _____ |
| Asian or Pacific Islander | _____ | _____ |
| American Indian or Alaskan Native | _____ | _____ |
| Non-resident alien | _____ | _____ |

7. On average, what percentage of all students who enter as full-time freshmen ultimately graduate from your institution?

| | |
|---|---|
| Percentage who graduate | _____% |

8. Of all students enrolled as full-time undergraduate students in Fall 1989, how many first entered as transfer students?

| | |
|---|---|
| Total number | _____ |
| White, non-Hispanic | _____ |
| Black, non-Hispanic | _____ |
| Hispanic | _____ |
| Asian or Pacific Islander | _____ |
| American Indian or Alaskan Native | _____ |
| Non-resident alien | _____ |

9a. Please give the total number of **all** undergraduate students (not just freshmen) who were enrolled as full-time students in Fall 1988. Of those, how many completed a degree or award in 1988-89, and how many of the remaining students did not continue (i.e., were not enrolled at your institution in 1989-90)?

| | Enrolled in 1988-89 | Completed degree in 1988-89 | Did not continue |
|---|---|---|---|
| Total number | _____ | _____ | _____ |
| White, non-Hispanic | _____ | _____ | _____ |
| Black, non-Hispanic | _____ | _____ | _____ |
| Hispanic | _____ | _____ | _____ |
| Asian or Pacific Islander | _____ | _____ | _____ |
| American Indian or Alaskan Native | _____ | _____ | _____ |
| Non-resident alien | _____ | _____ | _____ |

9b. *Of those that you listed above as not continuing after 1988-89*, please state the percentage in each of the categories below. If a student might fit within more than one category, please choose the category that best explains the student's reason for not being enrolled in 1989-90. Please give your best estimate if you do not have exact data, but place those students for whom you have no good information under "no information available."

| | |
|---|---|
| Transferred to another institution | _____ |
| Temporary interruption | _____ |
| Left education | _____ |
| No information available | _____ |
| Total | 100% |

10a. Over the last five years, has your institution adopted any new programs or substantially modified existing programs specifically to increase retention?

- Yes ☐
- No ☐

10b. If yes, what areas are involved?

| | Yes | No |
|---|---|---|
| Admissions programs | ☐ | ☐ |
| Testing/performance assessment to monitor students' progress or place them in courses | ☐ | ☐ |
| Help for students with academic difficulties | ☐ | ☐ |
| Help for students with personal issues | ☐ | ☐ |
| Help with student finances | ☐ | ☐ |
| Help with problems arising from a multi-racial and -ethnic environment | ☐ | ☐ |
| Identification of students likely to leave | ☐ | ☐ |
| Career guidance | ☐ | ☐ |

10c. What changes do you anticipate in the retention rate at your institution over the next five years?

- A decrease of at least 10 percent in the number who leave without completing a degree or award ☐
- No change, or a change of less than 10 percent ☐
- An increase of at least 10 percent in the number who leave without completing a degree or award ☐

11. Please provide the following information about your admissions of full-time first-time freshmen for the 1988-89 academic year.

- Number who applied for admission _____
- Number accepted for admission _____
- Number who enrolled _____

12. Please provide the following information about your full-time freshmen in Fall 1989.

a. For what percentage of entering freshmen do you have SAT scores? _____%

Average (mean) SAT score of entering freshmen
- Verbal _____
- Mathematics _____

b. For what percentage of entering freshmen do you have ACT scores? _____%

Average (mean) composite ACT score of entering freshmen _____

c. Percentage of entering freshmen in top 25% of high school class _____%

d. Mean high school grade point average of entering freshmen _____

On a scale from _____ to _____

13. Please provide the following information about all of your full-time students in Fall 1989.

a. Total number of full-time students ..... _____

b. Race/ethnicity
- White, non-Hispanic ..... _____
- Black, non-Hispanic ..... _____
- Hispanic ..... _____
- Asian or Pacific Islander ..... _____
- American Indian or Alaskan Native ..... _____
- Non-resident alien ..... _____

c. Gender
- Male ..... _____
- Female ..... _____

d. Percentage of students receiving Pell Grants ..... _____%

e. Percentage of students receiving institutional aid ..... _____%

f. Percentage of students living on campus ..... _____%

g. Percentage of all students who are enrolled fulltime ..... _____%

14. Please provide the following information about your institution.

a. Location of campus
- Urban ..... ☐
- Suburban ..... ☐
- Rural ..... ☐

b. Percentage of undergraduates who later attend graduate or professional school ..... _____%

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Thank you for your assistance.
Please return this form by August 10 to:

Higher Education Surveys
WESTAT
1650 Research Boulevard
Rockville, MD 20850

Please keep a copy of this survey for your records. Person completing this form:

Name_____

Title_____

Telephone (___)_____

If you have any questions or problems concerning this survey, please call Bradford Chaney at (800) 937-8281 (toll-free).

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